MAY 0 1 2006 W

PTO/SB/08A (07-05)
Approved for use through 07/31/2006. OMB 0851-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute	for form 1449A/PTO			Complete if Known				
				Application Number	10/632817			
		_	CLOSURE	Filing Date	August 04, 2003			
STAT	EMENT B	Y AI	PPLICANT	First Named Inventor	NEIL ANDRE ROBERTS			
2				Group Art Unit	1751			
(U	lse as many sheet	s as n	ecessary)	Examiner Name	John R. Hardee			
Sheet	1	of	1	Attorney Docket Number	VK0001USCIP			

			·	U.S. PATE	NT DOCUMENTS	
Examiner Initials	Cité No.1	Doc Number -	cument Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
1	[US-I	6,655,160 B2	12-02-2003	Roberts	Figures Appear
	 	US-				
		US-				
		US-				
		US-				
	<u></u>	US-				
	ļ	US-				
	 	US -				
<u> </u>	<u> </u>	US-		<u> </u>		
		US-				
	 	US-				
	┼──	US-		•		
	1	US-		i		
		US-				
		US-				
		US-				
		US-				
	<u> </u>	US-				
1	1	US-		1		

		FOREIG	N PATENT C	OCUMENTS				
Examiner	Cite	Foreign Patent Document	Publication Date			Pages, Columns, Lines, Where Relevant Passages or Relevant		
Initials*		CountryCode ³ Number ⁴ Kind Code ⁵ (<i>if known</i>)	MM-DD-YYYY	Applicant of Cited	Document	Figures Appear		
\mathbf{A}	-	WO 97 34961	09-25-1997	Goble				
4						<u> </u>		붜
						 		H
			 			<u> </u>		怙
						 		∤₽
		<u> </u>	1			'/	/	<u> </u>
Examine Signature		Hendy		Date Considered	5	(0)	96	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant: a USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the Indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the includial case, comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (07-05)
Approved for use through 06/30/2008. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a vaid OMB control number

Substitute for form 1449A/PTO Complete if Known Application Number 10/632817 INFORMATION DISCLOSURE Filing Date August 04, 2003 STATEMENT BY APPLICANT **NEIL ANDRE ROBERTS** First Named Inventor **Group Art Unit** 1751 (Use as many sheets as necessary) **Examiner Name** John R. Hardee VICABALLISCIP

5551	<u> </u>	Of 2 Attorney bookst restricts 47000103017						
		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS						
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2					
	_	BUTHER D. "R22 drip in a success of BRE", Redifferentian aris Air Compilerating, pp. 49-50 (1994) 7/BUT IS IULE GIBLE						
	W X	Fluorocarbon azeotropes, Research Disclosure 16265 (1977)						
		JP 01 139678 (English Translation of the Abstract)						
		PEARSON SF, "Uses of hydrocarbon refrigerants", I.I.FI.I.R. Commissions B1, B2, E1 and E2, pp. 439-46 (1998)						
R		E-mail reply from Herrick Conference to Felix Flohr dated May 27, 2003						
R		Internet citation, "Conference Organizing Committee", http://www.ecn.purdue,edu/Herrick/Events/organize- frame.htm						
7	,	Internet citation, "Registration Information", http://www.ecn.purdue.edu/Herrick/Events/Registration.htm						
~		ASHRAE Standard 34-2001, "Contents", pp.7 and 13						
V		Sworn Statement by Christoph Meurer						
R		BIRETT K, "Information sheets on hazardous substances" (1996)						
R		SOFFIENTINI ET AL., "Evaluation of alternative refrigerants when retrofitting R-22 refrigeration systems", Centro Studio Galileo Industria & Formazione Eleventh European Conference, Milan, Italy (2005)						
Examiner		Date Cloude						
	1 (Date CIACOCO						

Examiner Signature	Harde	Date Considered	5/10	06
	- , <i>V</i> •			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

MAY 0 1 20116 W

PTO/SB/08B (07-05)
Approved for use through 06/30/2006, OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
To persons are required to respond to a collection of information unless it contains a valid OMB control number

Sheet	2	of 2	Attorney Docket Number	VK0001USCIP							
	OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS										
Examiner Initials *	Cite No.1	the item (book, magazine, jour	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.								
V	1	JP 0	JP 01 139675 (English Translation of the Abstract)								
7	/	ROBERTS NA, "Determination of novel R22 replacement", Proceeding	the performance, leak scenarious of the Seventh International West Lafayette, Indiana	o, flammability and oil return characterictics of Refrigeration Conference at Purdue University, (1998)							
72	/	MUSSO E ET AL., "Miscele temar refrigerazione domestica", Confere	MUSSO E ET AL., "Miscele temarie a base di HFC contenenti idrocarburi come sostituti "drop in" di R12 nella refrigerazione domestica", Conference on Conditioning, Heating, Refrigeration: Innovations and Trends, Milan, Italy (1997)								
·											
Examiner	.	Day All	Date	- Ada							
Signature		MANCHE	Consider	$ed \mid S \mid \Theta \mid \Theta \leftarrow$							

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Petent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTC/SB/08B (U7-05)
Approved for Use through 08/30/2008, OMB 0651-0031

Approved for Use through 08/30/2008, OMB 0651-0031

U.S. Pellent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Pellent and Trademark University as water OMB control number

		Unde	or the Processorts.Reduction Act of 1995, no per	Nodera og pograda ara sade	d to a collection of t	formation unless it contains a valid OME control number			
					C	omplete if Known			
		form 144		Application Number 10/632817					
INE	ORI	TAN	ON DISCLOSURE	Filing Date		04. 2003			
DAL.			T BY APPLICANT	First Named Invent	or NEIL A	NDRE ROBERTS			
817	AIE	MEN	I BI AFFLIGAR	Group Art Unit	1751				
				Exeminer Name	4	t. Hardee			
			y sheets as necessary)	Attorney Docket N	umber VK000	TUSCIP			
Shee	<u>t </u>					DOCUMENTS			
		Cite	OTHER PRIOR ART — Include name of the author (in the item (book, manazine, jou	CAPITAL LETTER	S), title of the	article (when appropriate), title of	Τ2		
Exami nitials		No.1	the item (book, magazine, journal, serial, symposium, cateing, etc.), number(e), publisher, city and/or country where published. BUTLER D., "R22 drip-in a success at BRE", Refrigeration and Air Conditioning, pp. 49-50 (1994)						
			Piworoca	rbon azeotropes, Rese	arch Disclosure	18265 (1977)			
	_		- qt	01 139678 (English Tr	ansiation of the	Abstract)			
			PEARSON SF, "Uses of hydroc	carbon refrigerants*, 1.I.Fi.I.R. Commissions B1, B2, E1 and E2, pp. 439-46 (1998) from Herrick Conference to Felix Flohr dated May 27, 2003					
			E-meil reply f						
			Internet citation, "Conference C	Organizing Committee". http://www.ecn.purdue.edu/Herrick/Events/organize- frame.htm					
		_	Internet citation, "Registration	n information", http://w	nmallon", http://www.ecn.purdua.edu/Hemick/Evente/Registration.htm				
-	. <u> </u>		AS	SHRAE Standard 34-2001, "Contents", pp.7 and 13					
				Swom Statement by Christoph Meurer					
			BIRETT	K, "Information sheets	on hazardous	substances" (1996)	נ		
-	SOFFIENTINI ET AL., "Evaluation of alternative retrigerants when retroliting R-22 refrigeration systems", Centro Studio Gallieo - Industria & Formazione Eleventh European Conference, Milan, Italy (2005)								
<u></u>									
	amine gnatur			1 3	Date Considered				

*EXAMINER: Initial if reference considered, whether or not disting is in conformance with MPEP 609. Crew line through disting it not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (options). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to the (and by the USPTO to information is required by 37 CFR 1.97 and 1.98. The information is required to calculate its estimated to take 2 hours to complete, including process) an application. Condendation is governed by 35 U.S.C. 122 and 37 CFR 1.18. This collection is estimated to take 2 hours to complete, including process) an application. Condendation is governed by 35 U.S.C. 122 and 37 CFR 1.18. This collection is estimated to take 2 hours to complete the patients on the USPTO. Time will vary depanding upon the individual case. Any comments on the gathering, or require to complete this form and/or suggestions for raducing this burden, about the sent to the Chief Information Officer, U.S. Patient and account of time you require to complete this form and/or suggestions for raducing this burden, about the sent to the Chief Information Officer, U.S. Patient and 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS Trademark Office, U.S. Department of Commercie, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SE/088 (07-05) PTO/SERVED (PT-05)
Approved for use through 08/30/2006. Orde 0651-0031
Approved for use through 08/30/2006. Orde 0651-0031
U.S. Patern and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid QMB control number Complete if Known Substitute for form 1449A/PTO 10/632817 Application Number INFORMATION DISCLOSURE August 04, 2003 Filing Date STATEMENT BY APPLICANT NEIL ANDRE ROBERTS First Named Inventor 1761 Group Art Unit John R. Hardee Examiner Name (Use as many sheets as necessary) Attorney Dacket Number | VK0001USCIP of 2 Sheet 2 OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the litern (book, magazine, journal, serial, symposhim, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. Cite Examiner Initials * No. JP 01 138876 (English Translation of the Abstract) ROBERTS NA, "Determination of the performance, leak scenario, figurmability and oil return characterictics of novel R22 replacement", Proceedings of the Seventh International Refrigeration Conference at Purdue University, novel R22 replacement", Proceedings of the Seventh International Refrigeration Conference at Purdue University, noted R22 replacement, Proceedings of the Seventh International Refrigeration Conference at Purdue University, noted R22 replacement, Proceedings of the Seventh International Refrigeration Conference at Purdue University, novel R22 replacement, Proceedings of the Seventh International Refrigeration Conference at Purdue University, novel R22 replacement, Proceedings of the Seventh International Refrigeration Conference at Purdue University, novel R22 replacement, Proceedings of the Seventh International Refrigeration Conference at Purdue University, novel R22 replacement, Proceedings of the Seventh International Refrigeration Conference at Purdue University, novel R22 replacement, Proceedings of the Seventh International Refrigeration Conference at Purdue University, novel R22 replacement, Proceedings of the Seventh International Refrigeration Conference at Purdue University, Novel R22 replacement, Proceedings of the Seventh International Refrigeration Conference at Purdue University, Proceedings of the Purdue University (Novel R22 representation Purdue University (Novel R22 repre MUSSO E ET AL., "Miscela ternarta a basa di HPC contenenti direcarbuit come sostituti "drop in" di R12 nella nellagerazione domastica", Conference on Conditioning, Hesting, Retrigeration: Innovations and Trenda, Milan, retrigerazione domastica", Conference on Conditioning, Hesting, Retrigeration: Innovations and Trenda, Milan, retrigerazione domastica", Conference on Conditioning, Hesting, Retrigeration: Innovations and Trenda, Milan, retrigerazione domastica", Conference on Conditioning, Hesting, Retrigeration: Innovations and Trenda, Milan, retrigerazione domastica", Conference on Conditioning, Hesting, Retrigeration: Innovations and Trenda, Milan, retrigerazione domastica", Conference on Conditioning, Hesting, Retrigeration: Innovations and Trenda, Milan, retrigerazione domastica", Conference on Conditioning, Hesting, Retrigeration: Innovations and Trenda, Milan, Retrigerazione domastica", Conference on Conditioning, Retrigerazione domastica (Conference on Conditioning), Retrigerazio П

L			
Disprised	Date	i	
Examiner Signature	 Considered		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Oraw the through citation if not in conformance and not considered, include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English tenguage Translation is attached. This collection of information is required to faith or rebain a benefit by the public which is to file (and by the USPTO to information is required to faith or rebain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentially is governed by 35 U.S.O. 122 and 37 CFR 1.14. This obtained is estimated to take 2 hours to complete, including process) an application. Confidentially is governed by 35 U.S.O. 122 and 37 CFR 1.14. This will vary depending upon the individual case. Any comments on the gathering, preparing, and extensions the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the gathering, preparing the complete data form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commence, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTC/SB/08A (07-05)

Approved for use through 07/31/2008, OMB 0851-0031

and Trademark Office: U.S. DEPARTMENT OF COMMERCE

		l belocitie	Parement Re	eauction Act o	r 1996, no p <u>e</u> r	अग्रह का	r.e.u <u>Cast of bariuses</u>	end to a c	election of info	rmston unless	CONLEGE B	vasid CMB control number.	\
Substitute for form 1449APTO							U.S. Patent and triscernant Calcut. Calcut Calcut a value CALB control number are required to respect to a collection of information unless it contains a value CALB control number Complete if Known						4
						Appli	cation Numb	ध	10/632817				4
INFO	RM.	ATIO	N DIS	CLOS	URE	Films	Date		August 04, 2003				-
OTAT	EM	ENT	RY A	PLIC	ANT	First	Named Inve	rtor	NEIL AN	DRE ROB	ERTS		
SIAI	STATEMENT BY APPLICANT						p Art Unit		1751				-1
a	(Use as many sheets as necessary)								John R.				一
Sheet		1	of		1	Atto	ney Docket I	tumber	VK0001	USCIP			-
					11.8	PAT	ENT DOC	UMEN	πs				_
<u> </u>			cument Nun	nher					Patentee or		Pages,	Columne, Lines, Where	
Examiner	Cite				Publication MM-DD-		Applic	ent of C	iled Docum	ent	Raievan	it Passages or Relevant Figures Appear	۱_
tnitials "	No.	Number - Kind Code (Fixnown)			12-02-2	002		Ro	berts				
		US -	6,655,1	60 B2	12-02-2	.000							
		US -			 		-						
		US-			 								
		US								+			
 		US-											
		U\$-			 		 						_
		US-			 -		 -				·		
<u> </u>	<u> </u>	US-			+		 						
	├	us:	-		 								_
 	-	us-											_
 	╁	บร-			ΙΞ		<u> </u>						
		U\$ -					 						
		US-			↓		 -						
	!	US -	 		+		+						
	┺	US-	 		+								
	┼	US.	-										
	\top	US-											
-													_
						<u>EIGN</u>	PATENT				l Page	, Golumns, Lines, Where	1
Examina	Cit			atent Doc			Publication Date MM-DD-YYYY App		Name of Patentee or pplicant of Cited Docume		·	ent Passages or Relevan	t 10
(nl6ab*	No.	Countr	yCode [®] Num	iber Kind	Code ³ (# kno	(tree)		+	Gob			Figures / 49a.a.a	10
	oxdot		WC	97 3496		-+'	09- <u>25-1997</u>	╅					
	4_					-+-		+-					ļ
 						_							1
-	+-	+-											忙
-	\top	1				\Box							76
								-					T
	\bot					-		+					
								Date		Γ			
) Exami Signat		ļ						Cons	Idered	<u></u>			
conside	red. M	guas cop	y or one torri	WILLIAM OF	MPFP 901.	04. 3 E	nter Office the	d issued	the docume	ur ph the mo	-ICUET DOOR	n if not in conformance a ptional). 2 See Kinds Co e (MIPO Standard ST.3). document. 5 Kind of doc e & chack mark here if f	umen
Japans by the tanguag This co	e pare porten po Tren lloction PTO to	tate symbol listich is d of informa process)	stiached.	eted on the red by 37 C n. Consider	FR 1,97 and liably is gow	1.98. 1 amed by	MPO Standar The information 35 U.S.C. 12 Ecotion form	d 6T.16 n la requ 22 end 31 Lo the U	ired to obtain 7 CFR 1.14. USPTO. Tim	o creating a l This collection	ensfit by to n us estima depending	he public which is to file (ted to take 2 hours to ear upon the individual cal	and b inplote e, An
വനസ്	mis on i	ne amou	nt di mise Yee	ladme m			nd/ar suggest , P.O. Box 14 nts, P.O. Box	EA Alm	andria VA	22313-145D.	וטא סס	to the Chief Information SEND FEES OR COMP	LETE